AMENDMENTS TO THE CLAIMS:

Please amend claims 1-21 as follows:

1. (Original): A solar battery system comprising:

a solar battery panel receiving sunlight on a light receiving surface thereof and supplying electricity generated by photoelectric conversion to the outside;

a heat pipe having a plate-shaped structure, wherein a surface of said plate-shaped structure on one end portion side is affixed to a back surface of said light receiving surface of said solar battery panel, and receiving heat generated at said solar battery panel from said one end portion and conducting to the other end portion; and

a heat release part receiving said heat from said other end portion which is conducted through said heat pipe.

2. (Original): A solar battery system as set forth in claim 1, wherein a serpentine thin hole running some lengths between said one end portion and said other end portion of said plate-shaped structure is provided inside the plate-shaped structure of said heat pipe, and a refrigerant fluid is sealed in said serpentine thin hole.

3. (Original): A solar battery system as set forth in claim 2, wherein said refrigerant fluid is sealed, so that liquid phase parts and gas phase parts thereof exist alternately in said serpentine thin hole.

4. (Original): A solar battery system as set forth in claim 1, wherein a wick, a pressure-proof structure and an operating fluid are sealed in a movable state inside the plate-shaped structure in said heat pipe.

5. (Original): A solar battery system as set forth in any one of claims 1 to 4, wherein said back surface of said solar battery panel and said heat pipe are put together by a heat conductive adhesive.

6. (Currently Amended): A solar battery system as set forth in ~~any one of~~ claim[[s]] ~~1 to~~ 5, wherein a surface of said plate-shaped structure on said one end portion side is affixed to a back surface of said light receiving surface of said solar battery panel via a copper plate.

7. (Original): A solar battery system as set forth in claim 6, wherein said back surface of said solar battery panel is divided to a plurality of fields, a plurality of said heat pipes are affixed to each of said fields via said copper plate, and a fixed area of said heat pipes and said copper plate is smaller than an area of said fields.

8. (Currently Amended): A solar battery system as set forth in claim ~~6 or~~ 7, wherein said back surface of said solar battery panel and said copper plate and/or said copper plate and said heat pipes are put together by a heat conductive adhesive.

9. (Original): A thermoelectric hybrid solar battery system, comprising:

a solar battery panel receiving sunlight on a light receiving surface thereof and supplying electricity generated by photoelectric conversion to the outside;

a heat pipe having a plate-shaped structure, wherein a surface of said plate-shaped structure on one end portion side is affixed to a back surface of said light receiving surface of said solar battery panel, and receiving heat generated at said solar battery panel from said one end portion and conducting to the other end portion; and

a hot water generation part for obtaining hot water by storing water inside, immersing the end portion of said other side of said heat pipe in said water, and transferring said heat conducted in said heat pipe from said other end portion side to said water to heat said water.

10. (Original): A thermoelectric hybrid solar battery system as set forth in claim 9, wherein a serpentine thin hole running some lengths between said one end portion and said other end portion of said plate-shaped structure is provided inside the plate-shaped structure of said heat pipe, and a refrigerant fluid is sealed in said serpentine thin hole.

11. (Original): A thermoelectric hybrid solar battery system as set forth in claim 10, wherein said refrigerant fluid is sealed, so that liquid phase parts and gas phase parts thereof exist alternately in said serpentine thin hole.

12. (Original): A solar battery system as set forth in claim 9, wherein a wick, a pressure-proof structure and an operating fluid are sealed inside the plate-shaped structure in said heat pipe.

13. (Currently Amended): A thermoelectric hybrid solar battery system as set forth in ~~any one of~~ claim[[s]] ~~9 to~~ 12, wherein said back surface of said solar battery panel and said heat pipe are put together by a heat conductive adhesive.

14. (Currently Amended): A thermoelectric hybrid solar battery system as set forth in ~~any one of~~ claim[[s]] ~~9 to~~ 13, wherein a surface of said plate-shaped structure on said one end portion side is affixed to a back surface of said light receiving surface of said solar battery panel via a copper plate.

15. (Original): A thermoelectric hybrid solar battery system as set forth in claim 14, wherein said back surface of said solar battery panel is divided to a plurality of fields, a plurality of said heat pipes are affixed to each of said fields via said copper plate, and a fixed area of said heat pipes and said copper plate is smaller than an area of said fields.

16. (Currently Amended): A thermoelectric hybrid solar battery system as set forth in claim ~~14 or~~ 15, wherein said back surface of said solar battery panel and said copper plate and/or said copper plate and said heat pipes are put together by a heat conductive adhesive.

17. (Currently Amended): A thermoelectric hybrid solar battery system as set forth in ~~any one of~~ claim[[s]] ~~9 to~~ 16, wherein a heat release accelerator for improving an effect of conducting heat to said water is formed at the end portion of said other side of said heat pipe.

18. (Currently Amended): A thermoelectric hybrid solar battery system as set forth in ~~any one of~~ claim[[s]] ~~9 to~~ 17, comprising a hot water bath to be supplied with hot water from said hot water generation part.

19. (Currently Amended): A thermoelectric hybrid solar battery system as set forth in ~~any one of~~ claim[[s]] ~~9 to~~ 18, wherein said hot water generation part has a tank shape.

20. (Original): A thermoelectric hybrid solar battery system as set forth in any one of claims 9 to 18, wherein said hot water generation part has a pipe shape.

21. (Original): A thermoelectric hybrid solar battery system as set forth in claim 20, wherein:

said solar battery panel is installed along a slope at an angle with a horizontal plane; and

said hot water generation part is provided to be connected to said solar battery panel via said heat pipe at sides arranged to be inclined along said slope of said solar battery panel.